ESTABLISHING THE KNOWLEDGE OF STAFF REGARDING CORRECT MEDICATION PRACTICES

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INTRODUCTION

Prevention of medication errors is ideal, however, detection of errors that have occurred is also important to identify those that are common in the particular setting, to identify their root causes, and to prevent them from happening again (Aronson, 2009). Nurses are familiar with the legislation that guides them in terms of their Scope of Practice (i.e. Nursing Act 33 of 2005, Scope of Practice – R2127, Acts and Omissions – R767, Medicine and related substances Act R101 of 1965). These regulations stipulate that nurses must, at all times, advocate for their patients. However, at times, distractions and various factors affect the nurses' ability to perform their duties optimally. The Academy of Managed Care Pharmacy (AMCP) recognises the importance of this matter and supports programmes that help achieve the goal of improved patient safety and prevention of medication errors.

The Inland North region was overwhelmed with the number of medication incidents during the first quarter of 2023. Two of the facilities (A and B) were among those that had an increase in the number of medication errors reported during the first quarter of 2023. It was important to understand the main root causes for the medication errors from the two facilities mentioned above in the Inland North region for them to identify the actual root causes. An analysis was conducted in the form of a "medication drive project". The medication drive included most of the registered and enrolled nurses from both facilities. From the current root causes identified by these facilities, it was reported mostly that the errors occur as a result of incorrect dose administered, drug administered to the wrong patient and incorrect time of administration. However, the real causes of these issues were not known to the nursing management of these facilities. Hence, the medication drive was conducted to identify the main reasons for these errors.

OBJECTIVES

- Assess staff knowledge regarding patient identification and correct completion of medication script
- Focus on continuous quality improvement
- Enhance multi-disciplinary collaboration and integration
- Ensure that staff are rewarded and recognised for participating on this project, in support of the Company's Employee Value Proposition (EVP)
- Identify training opportunities while collaborating with the multi-disciplinary team members, for the process to be successful and sustainable

METHODS

For the analysis / medication drive to be successful, clinical training specialists were involved, together with the unit managers and the nursing management teams of these facilities. The process was planned properly and with much consideration taken into account. The first phase included: evaluating the correct patient identification with the current patient ID bands used in these facilities (white, blue, red, yellow and pink ID bands). Staff were given these ID bands randomly upon arrival on duty in the morning at the staff entrance. They were expected to correctly complete the ID bands and place them in a box. These were marked and the results were analysed. The second phase included a quiz which required them to list the 6 Rights of Medication Administration. The last phase of the drive involved the staff answering questions regarding the correct formula used for medication administration.

Staff members were invited to join this drive for three months where they were tested on their knowledge and understanding of the two phases mentioned above. Questions were formulated and a staff member from each unit was invited and nominated by their unit manager and their peers to represent them during the last phase of the medication drive. The clinical training specialist went to the wards for this phase and staff on duty on each particular day were evaluated against the formulated questionnaires. The last phase was around staff answering 26 questions which were formulated by the nursing management team and the regional team for the Inland North region at the end of the three months. The purpose of the last phase was to ensure that all relevant stakeholders in the facility were involved in this process, as well as aiming to create as much awareness and collaboration as possible. Recognition was also included for the winners from each unit. The medication drive was concluded with a medication quiz for all the staff who were identified from each unit and the winners were recognised individually as the medication queen or king for medication errors. In addition, to ensure that the process was fair and objective, judges were not from these facilities. They included the regional doctor responsible for clinical processes of the region, the regional pharmacist, the regional education manager as well as the regional clinical pharmacist.

RESULTS

- Staff members were not identifying patients correctly when about to administer the medication. This resulted in the wrong patient receiving the wrong medication.
- Staff members did not know how to calculate the dosages of the medication hence the incorrect dosage administered.
- Staff members were also not double-checking with one another (Work procedure NUR-WP-NUR-006) and they were, in most cases, distracted either by doctors rounds and theatre admissions which needed their attention at the time. Hence medication was administered at the wrong time.
- Staff were not completing the medication record properly and as per legal scientific requirements work procedure (NUR-WP-NUR-006)
- The medication drive was successful and the staff from both facilities were eager to attend the next phase of the drive. The involvement of the pharmacy team and hospital management encouraged the staff and they felt supported in improving their patient's outcomes.
- Crowning of the medication queen or king from both the facilities occured. Facility A had an overall winner and a second runner-up who received individual prizes. Facility B also had three winners that received individual prizes.
- The two facilities in the table below illustrate that during the first quarter they had an increase in their medication errors and in the second quarter the medication drive process was implemented. The effects of the medication drive process can be noted during the third quarter of this financial year. This is still a work in progress.

Facility A results	Number of medication errors	Rate	Facility B results	Number of medication errors	Rate
Group Goals		**0.87**			
2022 (PYTD)	27	0.74	2022 (PYTD)	31	0.71
2023 (YTD)	46	1.04	2023 (YTD)	46	0.90
Quarter 1 – 2023	**19**	**1.23**	**Quarter 1 – 2023**	**19**	**0.94**
October	10	1.94	October	2	0.28
November	5	0.95	November	13	1.79
December	4	0.83	December	4	0.68
Quarter 2 – 2023	**13**	**0.78**	**Quarter 2 – 2023**	**24**	**1.05**
January	4	0.79	January	6	0.81
February	6	1.10	February	16	2.11
March	3	0.49	March	2	0.39
Quarter 3 – 2023	**14**	**1.15**	**Quarter 3 – 2023**	**12**	**0.76**
April	3	0.47	April	3	0.39
May	11	1.89	May	9	1.13
June	Still to follow		June	Still to follow	

PHOTOS

Life Peglerae Hospital team after round 1 of the medication quiz.

Life Peglerae Hospital crowning of the medication queen and the regional judges.

Life Eugene Marais Hospital crowning of their medication queen and the two runner ups and the nursing management team.

CONCLUSION

Healthcare facilities need to continue focusing on reducing medication errors to ensure improved patient clinical outcomes. This quality initiative is indicative that where adverse events occurred, it's better to do an analysis of the problem so that the real root causes can be addressed. In addition, staff involvement and engagement plays an important role in such initiatives.

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